## BOOK REVIEW

Wonder Workers of the Insect World by Hiram J. Herbert, 160 pages, 16 plates of illustrations, E. P. Dutton \& Co., Inc., New York. Published September 1960. Price $\$ 3.00$.

The volume carries a foreword by Dr. Lucy Clausen. It consists of fifteen chapters, a "bibliography" and an index. The subject matter deals with both insects and spiders with the former predominating. Three of the chapters are devoted to the habits of wasps. Others deal with the habits of dragonflies, fireflies, mantids, grasshoppers, butterflies, moths, antlions and mosquitoes.

Mr. Herbert's book adds another title to the growing list of volumes which attempt to popularize insect habits. The mention of such a book is usually enough to make the trained entomologist groan, for he knows before he opens the cover what he will find in it. The author will be coy, both with his readers and with the insects he is introducing to them. In Mr. Herbert's volume this is carried to the extreme of having the insect speak to the reader. There is certain to be overdramatization, often accompanied by needlessly lurid prose. The attack of a pompilid wasp on a spider is sufficiently savage to need no literary embellishment, yet Mr. Herbert is not content to report the facts, the wasp must scream during the attack. Perhaps Mr. Herbert has confused the wasp with the reader in this case, for the reader certainly has good justification for screaming.

One of the most disturbing features of Mr. Herbert's work is his lack of consistency in the terminology applied to the stages of insect metamorphosis. Much of the time he seems to be uncertain of whether he is dealing with a larva, a nymph or a pupa. We cannot suppose that Mr. Herbert has followed the obsolete practice of applying the term "nymph" to the pupal stage; he knows the term "pupa" and sometimes uses it correctly. But at other times he fails to do so with harrowing results. Thus in his chapter on Vespa (page 69) Mr. Herbert states that in a nest which he had been watching "the larvae began cutting their way out of their nymphal chambers." This was reported as a first hand observation, a fact which makes Mr. Herbert's other pur-
ported observations highly suspect. For if Mr. Herbert had observed the emergence of the young wasps he would have known that the adult emerges from the pupal cell. Since he correctly records (page 20) that the larva of Pompilus pupates and later emerges as an adult, his confused account of Vespa becomes even more inexplicable. Nevertheless, there is a perverse skill in it, for Mr. Herbert has achieved the unenviable distinction of including three major errors in a statement nine words in length.

It is unfortunate that someone with entomological training was not secured to help the illustrator, Robert Gartland. Mr. Gartland evidently has the knack of instilling life into his drawings. But it is equally evident that he knows nothing about insects and the structures which he portrays are often so grossly inaccurate that one loses sight of the liveliness of his drawings. There has been overdramatization here also, for no other interpretation can be put on the illustration opposite page 130, where a colossal, one-eyed mosquito, whose wings are attached to the metathorax, gazes from what appears to be the flight deck of an aircraft carrier at its prospective victim.

At a time when it has been clearly shown that the general public accepts and enjoys authoritative scientific articles, when these are clearly written and presented without condescension or coyness, it is difficult to see why Mr. Herbert's book should have been considered for publication. It is neither original, authoritative nor written in a pleasing literary style. It does not seem too much to ask that both the publishers and the writers of "popular" scientific books wake up to the fact that the general reader is not a feeble-minded idiot.-W.S.C.

